Division of Information Technology Services Technical Bulletin

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Section/Groups:

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ADABAS SQL

A new release of ADABAS SQL is scheduled for implementation March 8, 1992. This release will require that a change be made to the global (ADAGLB) parameters used in the precompiler process. A new global parameter, SYSFILE, is required with this release. It specifies to ADABAS SQL the database ID and file numbers of the PREDICT file and NATURAL System file. This change will only be required for programs that are compiled after this date. It is not necessary to recompile existing programs.

Information Technology Services (ITS) maintains a set of standard global parameters that can be referenced in the precompiler step. Because it will now be necessary to supply database specific information in these parameters, anyone that is currently referencing "GP.ADASQL.SRCE(ADAGLOB)" or "GP.ADASQL.SRCE(ADAGLOBC)" via their ADAGLB precompiler DD statement must replace it with the appropriate GP.ADASQL.SRCE member from the list below:

Database Name	DBID NBR	COBOL	CICS COBOL
General Government	1	ADAGLB1	ADAGLBC1
Development	2, 12	ADAGLB2	ADAGLBC2
Criminal Justice	3	ADAGLB3	ADAGLBC3
Human Services	4	ADAGLB4	ADAGLBC4
Acceptance Test	5	ADAGLB5	ADAGLBC5
Education Dev	7	ADAGLB7	ADAGLBC7
Education Prod	8	ADAGLB8	ADAGLBC8
Training	9	ADAGLB9	ADAGLBC9

For those that maintain their own global parameters, it is necessary to add the following statement replacing "x" with the appropriate DBID number:

SYSFILE FNAT=(x,12),FDIC=(x,16)

The use of ALIAS in the FROM Clause of the FIND statement has also been changed. This change will only impact programs that specify a list of files rather than a single file in the FROM Clause of the FIND statement. This release requires that the ALIAS be supplied immediately following the name of the file to which it refers instead of after the file name list.

Several additional enhancements are also incorporated into this release. The Software A.G. Product Release Notes detailing these enhancements are attached.

New reference and error message manuals for ADABAS SQL are available for order through Elaine Oaks, ITS.

If you have nay questions or concerns regarding these changes, please contact Application Review Services at 538-3720.

Release Notes

Change to FIND Statement

If an alias is specified in the FROM clause of a FIND statement, it must be coded after the name of the file to which it refers and not, as in previous releases of ADABAS SQL, after the file name list.

This change has been made so that physically-coupled and soft-coupled files can be processed using a consistent FIND statement syntax. It also conforms to the SQL standard.

Enhancements in ADABAS SQL Version 1 Release 4 SM Level 1

Ada Support

ADABAS SQL now supports the Ada programming language. There are a few restrictions that must be observed when using ADABAS SQL with Ada; these are listed in Appendix A of the ADABAS SQL Reference Manual.

Enhanced CICS Support

If the global option MONITOR CICS is specified, the CICS response code interpretation routine (RESPCICS) and the CICS runtime trace-printing routine (PRTRCICS) will be linked with the generated application program.

Copy code that is included in CICS programs and external subroutines calls are now documented in the cross-reference information.

Hyperdescriptor Support

Search criteria can now refer to hyperdescriptors in the WHERE clause. It is the user's responsibility to provide a valid hyperexit routine and to create the hyperdescriptor entries.

Error Messages

ADABAS SQL error messages are now stored in the system file. Additional information about errors can be displayed with the SYSERR utility program, or by entering "? DICnnnn" in the SYSDIC command line.

Error Handling in User Programs

Improved facilities for handling errors in user application programs are provided. ADABAS SQL now includes a "WHENEVER" statement that enable the user to write code that will be activated when a database error condition occurs.

Access to Last Field in MU and PE Fields

The keyword LAST may be coded when specifying the index of a multiple-value field (MU) or a periodic group (PE). Similarly, i-LAST can be coded to indicate the last n occurrences of the multiple field or periodic group. This facility is available with ADABAS Version 5 only.

Time Limit for FIND Statement

A time limit can be specified for FIND statements, using the MAXTIME clause (only available with ADABAS Version 5).

Enhancements to CONNECT Statement

New options MAXISN, MAXHOLD, MAXCID, MAXTIME, TT and TNA have been added to the CONNECT statement (only available with ADABAS Version 5).

New Global Parameters

Several new global parameters have been introduced:

- C Global parameter option SOFT enables or inhibits the generation of retrieval statements that refer to soft-coupled files (only available with ADABAS Version 5)
- Global parameter option NONDE enables or inhibits the generation of retrieval statements whose search criteria refer to non-descriptor fields (only available with

ADABAS Version 5)

- Global parameter option GFORMAT causes ADABAS SQL to generate a global format for the program. This can improve application program performance, particularly in online environments, by reducing the number of format buffer translations (only available in ADABAS Version 5)
- A new clause, "LAST", has been added to the global ADACALL parameter, allowing additional flexibility when passing data to ADABAS
- C The NATURAL system file, which contains the ADABAS SQL error messages, and the PREDICT data dictionary file are now specified with the global SYSFILE parameter.
- C The user ID can be specified and documented in the active cross-reference information using the global USER parameter.

Enhancements in ADABAS SQL Version 1 Release 4 SM Level 2

Synonyms Supported

Language-specific synonyms can now be used in the SELECT clause of ADABAS SQL retrieval statements. For example, in a COBOL program a field can be selected by coding either its primary name or its COBOL synonym.

Logical Fields Supported

Logical (binary) fields may be specified in SELECT clauses. SET clauses, and assignments for the INSERT statement.

CONNECT Statement Uses PREDICT Default Values

The options of the ADABAS SQL "CONNECT" statement take their default values from the PREDICT data dictionary.

Program Name Can Now be Passed to ADABAS Commands

If the ADABAS SQL global parameter "ADACALL" is specified, the 7th parameter passed at each ADABAS call is initialized with the name of the current program.

Copy-Code Preprocessor Improved

The copy-code processed by the ADABAS SQL "GENERATE" statement can now include nested periodic group fields, tha is, PEs within Pes.

Error Messages Take from NATURAL System File

The option "OPEN" has been added to the list of options that can be specified in the ADABAS SQL global parameters. This new option should be specified if the ADABAS database that stores the PREDICT data dictionary is running with OPENRQ=YES in the ADARUN parameters of the nucleus.

New Global Parameter "DDMMYY" Added

The global parameter "DDMMYY" should be specified if your operating system returns the current date in the European format, i.e., with the day preceding the month.